

DOCUMENT RESUME

ED 310 886

PS 018 330

AUTHOR Gilman, David A.
 TITLE Prime Time in the First Grade at the North Gibson School Corporation: The First Four Years. A Longitudinal Evaluation of Indiana's State-Supported Reduced Class Size Program.
 INSTITUTION Indiana State Univ., Terre Haute. Professional School Services.
 PUB DATE Nov 88
 NOTE 46p.; Prepared by Professional School Services.
 PUB TYPE Reports - Evaluative/Feasibility (142)
 EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS *Academic Achievement; *Class Size; Comparative Analysis; Elementary School Students; *Grade 1; Longitudinal Studies; Mathematics Skills; Primary Education; Program Evaluation; Reading Ability; Self Concept; State Programs; *Student Attitudes
 IDENTIFIERS North Gibson School Corporation IN; *PRIME TIME Project IN

ABSTRACT

The purpose of this study was to investigate the impact of reducing the size of first grade classes on students' achievement. Four groups of first grade students who had participated in Indiana's Project PRIME TIME (average class size of 18 or fewer) for 1 year were compared to one class of first grade students who had received first grade instruction in larger classes. Both groups were from the same Indiana school system. The following kinds of test scores were used as the basis for comparison: (1) achievement scores that all students had received on local competency tests in mathematics and reading; and (2) scores received on affective measures of self-concept and attitude toward school. These tests were administered to the students at the end of their respective first grade years. The school year for the larger class group was 1983-84. The school years for the smaller PRIME TIME classes were 1984-85, 1985-86, 1986-87, and 1987-88. When the means of PRIME TIME group achievement and attitudes were compared to the means of the larger class group (non-PRIME TIME), the results showed that there were significant differences in all areas compared. All favored PRIME TIME. Furthermore, the means of PRIME TIME classes of recent school years were generally significantly higher than the means of PRIME TIME classes of earlier years. (RH)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED310886

PS018330

U.S. DEPARTMENT OF EDUCATION
Office of Education Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
grantee.
Minor changes have been made to correct
typesetting or scanning errors.
 Further review or processing may be necessary.
Reference is made to the original document
for details.

PRIME TIME in the First Grade at the
North Gibson School Corporation:
The First Four Years

A Longitudinal Evaluation of
Indiana's State-Supported
Reduced Class Size Program

by

David A. Gilman, Ph.D.

Prepared by
Professional School Services
1315 School of Education
Indiana State University
Terre Haute, IN 47809

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

David A.
Gilman

November 1988

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)"

© North Gibson School Corporation

Abstract**1**

The Research Report**2**

References**3**

Table of Longitudinal Results, 1984-85 to
1987-88**4**

Table of Schools and Classroom Results
1987-88**5**

Figures of Schools and Classroom Results
1987-88**6**

Mathematics Skill Scores by School**7**

Reading Scores by School
1987-88**8**

Affective Scores by School
1987-88**9**

Measures Used in the Study**10**

Abstract

The purpose of this study was to investigate the impact of smaller first grade class size on students' achievement.

Four groups of first grade students who had participated in PRIME TIME for one year were compared to one class of first grade students who had received first grade instruction in larger classes. Both groups were from the same Indiana school system. The achievement test scores that all students had received on local competency tests in mathematics and reading and on affective measures of self concept and attitude toward school were used as the basis for comparison. These tests were administered to the students at the end of their respective first grade years. The school year for the larger class group was 1983-84. The school years for the smaller PRIME TIME classes were 1984-85, 1985-86, 1986-87, and 1987-88.

When the means of PRIME TIME group achievement and attitudes were compared to the means of larger class group (non-PRIME TIME), the results showed that there were significant differences in all areas compared (i.e., reading, math, self concept, attitude toward school, and total affective) favoring PRIME TIME. Furthermore, the means of PRIME TIME classes of recent school years were generally significantly higher than the means of PRIME TIME classes of earlier years.

The Effect of Project PRIME TIME
ON Achievement

Background of the Problem

A major concern in the field of education today is the effect of class size on the achievement of students. Needless to say, there are conflicting reports as to the relevance of class size to achievement. Experts (Bain & Achilles, 1986) agree that class size has been a continuing issue in negotiating between teachers and school boards. Smith and Glass (1980) agree and suggest that among techniques designed to improve education, decreasing size is the most controversial.

It is assumed that higher achievement is the goal of education and therein lies the controversy. Cacha (1982) summarizes this by saying that the relationship between class size and achievement has been inconclusive because some studies favored smaller classes, others larger classes, and some found no relationship between the two. Since higher achievement is the measuring stick usually used by policy makers and those with the purse strings to evaluate education, one must demonstrate "scientifically" that decreasing class size has social utility - that is it produces higher achievement test scores at a reasonable cost. (Smith & Glass, 1980) Where money is involved there will always be controversy; people want something for their money.

For most school corporations, the bottom line is money. "If the size of classes can be increased even slightly," Cacha (1982) says, ". . . substantial savings of school funds are possible, particularly in large school districts." Karen Klein (1985) reports that, ". . . in order to

maximize each child's potential, classes must be so small that few schools can afford to staff and house them." She continues by saying that not surprisingly, school administrators are less interested in statistical techniques than in dollars. A. Graham Down (1979) agrees and concludes that, "Since teacher salaries typically account for 75 per cent of the budgets, school boards should ask if money spent to pay more teachers to teach fewer students could be better spent elsewhere (e.g. on materials or teaching training)."

Teachers, on the other hand, seem to be less concerned with money. Bain and Achilles (1986) cite class composition related problems - particularly class size and the increased academic and emotional needs of students - as heading the list of teacher dissatisfaction and concern. To Bain and Achilles ". . . it seems intuitively logical that dramatically smaller classes (one teacher to approximately fifteen students) should influence the teaching/learning process in a positive way."

To date, there are three major studies that influence most of the attitudes and feelings on the subject of lowering class size to increase student achievement. The first such study was a review of the literature done by the Educational Research Service (1978). Their analysis of original research studies and reviews concluded that cause and effect relationships pertaining to the class size issue were highly complex and interlocked with many other variables. There was a general concensus that the effects of class size on achievement across all grade levels were contradictory and inconclusive. The research concluded that existing research findings did not support the contention that smaller classes will of themselves result in greater academic gains for pupils.

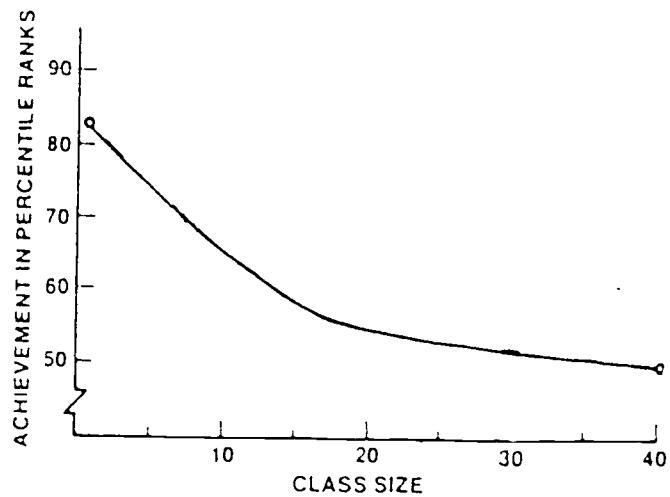
According to Silberman (1978), the ERS found that ". . . some

groups of students - children in lower grades, disadvantaged youngsters, and those with lower academic ability do, indeed, achieve more when in smaller classes, provided that the teachers adjust methodology to reduced class size." The ERS study (1978) showed that there was evidence that small classes are important especially in primary grades; however, few if any gains could be expected from reducing class size if teachers continue to use the same instructional procedures in the smaller classes that they used in the larger ones.

The second major study was done by Glass and Smith (1980) of the University of Colorado, Boulder. In 1978 and 1979 they presented the results of statistical integration of the research - drawing from 80 studies - on the relationship between class size and achievement demonstrating what they felt was a substantial relationship between the two. The technique they used was termed "meta-analysis" which involved analyzing all existing statistical data. Smith and Glass obtained some 300 reports, publications, theses, etc. to use in their "meta-analysis". The data set was based on nearly 900,000 pupils and spanned over half a century. (Cahen & Filbey, 1979).

To tie all of the data together, Smith and Glass developed a regression model to predict the standard score. This regression model was used to generate a graph of predicted achievement. The predicted achievement scores were transformed to a percentile rank on a hypothetical nationally normed standard achievement test. The Glass-Smith curve for well designed studies is shown in Figure 1. (Cahen & Filbey, 1979)

Figure 1



Relationship Between Achievement and Class Size
(The Glass-Smith Curve For Well Designed Studies)

Basically, those studies, which according to Glass and Smith (1980) employed rigorous control, yielded results that ". . . showed that the difference is being taught in a class of 20 versus a class of 40 is an advantage of 10 percentile ranks." The figure shows that the curve starts to rise dramatically when class size is reduced to below 15 pupils. The average pupil in class sizes of 40, 20, 15, 10 and 5 would be expected to score at the 50th, 58th, 65th, and 75th, respectively. Karen Klein (1985) interprets this by saying that the greatest gain in achievement occurred among students who were taught in classes of 15 pupils or less. In classes of 20 to 40 students, class size had a less dramatic effect on student's achievement.

According to the Educational Research Service (1980), Glass and Smith's conclusions were over generalized. Sid Bourke (1986) tries to synthesize the conflicting opinions by stating that in accepting that smaller classes promote higher student achievement, the major interest then centers on the mechanisms through which class size affects achievement. He suggests that the mechanism involves classroom processes, more specifically, teaching practices. Cahen and Filbey (1979) agree that the teacher plays an important role. They suggest that the effect of class size depends on the intervening classroom instruction. Poor teaching, according to them, will not be effective, even in small classes. Silberman (1978) adds that teachers tend to teach the same way to ten students as to twenty or thirty. If this is the case, then size would not really matter. A recommendation by Cahen and Filbey (1979) is that any plan that reduces class size should also support and educate personnel to realize the potential.

The third major study was supported by the U.S. Office of Education. In this study, Tomlinson (1988) concluded that reductions in class size by

itself is very costly, is unlikely to result in improvements, and will have little effect on student learning.

Amidst the controversy of class size, two states, Tennessee and Indiana, have attempted to implement smaller classes as a means of increasing student achievement. In 1984, the Tennessee legislature passed the Comprehensive Education Reform Act. One of the outcomes was the establishment of Centers of Excellence. One such center at Tennessee State University studied the effect of pupil/teacher ratio of 15:1 on students grades one through three. In comparing 15-student classes to regular classes, the teachers agreed that the overall classroom environment was more conducive to learning in the smaller classes. They concluded that a pupil/teacher ratio of 15:1 by itself causes pupil gains is less likely than that small class size is a facilitating factor that allows or encourages improved teaching. (Bain & Achilles, 1986) This conclusion is in line with Cacha's analysis (1982) of the Educational Research Services' finding that there were indications that achievement was related to quality of instruction rather than class size. Indiana's Project PRIME TIME reduced class size throughout the State to an average of eighteen or fewer students. The school year 1987-88 marked the fourth year that PRIME TIME had been introduced into the first grade classrooms of the North Gibson School Corporation. The most recent analysis (Tillitski, Gilman, Mohr and Stone, 1988) had demonstrated that PRIME TIME had resulted in gains for first grade classes in each year of its implementation. However, the continuation of the project into grades two and three had erased the gains found in the first grade.

This study will attempt to determine whether the original gains of the first grade classes in a State-sponsored reduced size classroom are being

maintained. If class size reduction aids student achievement, then the means of students in smaller classes should be higher than the means of students in larger classes.

Statement of the Problem

General Problem. The general problem for this study was to ascertain what can be done to improve student achievement and attitudes.

Specific Statement of the Problem. Specifically, this study sought to determine whether first grade students who participated in the PRIME TIME program had higher achievement scores, mastered more skills, had a higher self concept, had a better attitude toward school, and higher total affective scores than those students taught in larger classes.

Hypotheses. The following hypotheses were investigated in the study:

(1) Students who participated in PRIME TIME will have higher mathematics and reading scores than students taught in larger classes.

(2) Students who participated in PRIME TIME will master more mathematics and reading skills than students taught in larger classes.

(3) Students who participated in PRIME TIME will have a higher self concept than students taught in larger classes.

(4) Students who participated in PRIME TIME will have a better attitude toward school than students taught in larger classes.

(5) Students who participated in PRIME TIME will have a higher affective score than students taught in larger classes.

(6) On the measures of each of the (1-5) above, students taught in the final year of PRIME TIME will have significantly higher scores than students taught in the earlier years of PRIME TIME.

Method

Sample Selection. The sample for this study consisted of 866 first graders from three schools in the North Gibson School Corporation of Princeton, Indiana. Princeton is a moderate size community with a commuting population, light industry, and a surrounding agricultural industry. The school has a wide range of incomes; however, there are not many minorities represented. The school district is representative of many of the school districts of Southern Indiana.

Groups. The PRIME TIME group for 1987-88 consisted of 142 students with an average class size of 17.5 students for the school year. The group was the fourth first grade class to participate in PRIME TIME. The scores of the four PRIME TIME groups were compared to the scores of the 190 students of the larger classes of the 1983-84 school year. During this time, the average class size was 23.7.

Table I contains the mean number of students in first grade during each of the five school years of the study.

Table I

Mean First Grade Class Size of the
North Gibson School Corporation

School Year	1983-84	1984-85	1985-86	1986-87	1987-88
Mean Class Size	23.7	19.9	16.1	16.6	17.5

Tests. Samples of all instruments used in this study are contained in Section 10 of this report. It is fair to say that although some refinement in format was attempted in 1988, the content of the tests was the same as used in previous years.

Basic Skills Tests (Studies 1-4). These studies compared results on locally constructed tests of basic skills for the two-year period in an attempt to determine whether significant gains in scores could be attributable to class size. Tests were constructed by the evaluator's staff for the purpose of measuring mastery of the mathematics and reading skills that had been designated by teachers to be the curriculum content of the first grade.

Separate tests were constructed for mathematics skills and for reading skills. The mathematics tests measured thirteen skills with five items per skill for a total of 65 items. The reading test measured 16 skills with 6 items per skill for a total of 86 items. However, for purposes of this study, the items were reduced to four items per skill in each subject. The total numbers of items for mathematics and reading were 52 and 70 respectively. Tests were administered during the first week of May during each of the five school years. Tests were scored according to the number of correct responses and also according to the number of concepts that had been mastered by the student. A score or 70 percent of the items for a skill answered correctly was selected as the mastery criterion. Tests were of higher reliability with each of the two tests having reliability indexes of above .90 for each of the two years. Measures used in this study are shown in Section 10.

Study 1 compared the mean percentage of the total raw score on the Mathematics Skills Test. Study 2 compared the mean percentage of the total raw scores on the Reading Skills Test. Scores for each of the individual skills were compared to a criterion score of 70 percent. The number of

skills that had been mastered by each student was determined. Study 3 compared the mean number of skills mastered for each of the two groups. Study 4 compared the mean number of reading skills that had been mastered for the two groups.

Affective Measures (Studies 5-6). At the request of one of the principals of the participating schools, an affective measure was developed to ascertain whether significant differences existed between the attitudes and values of the two groups.

After extensive research by the evaluator's staff into what would constitute measures of attitudes and values for the first grade students, a 36 item affective test of the Likert variety was constructed. Research has shown that the only meaningful measures of attitudes and values for children in the study were self concept and attitude toward school. The number of items on the self concept measure was 19 and the total number of items on the attitude toward school measure was 17. A total affective measure comprised of the sum of the two self concept and attitude toward school scores was also computed.

Design. The design of the study was a COHORT study. The mean scores that students had received on each of the seven measures was compared for each of the five years of the study. As an afterthought and because of the gains by students in the last year of the comparison, mean scores of the last PRIME TIME year were compared to mean scores of the previous PRIME TIME years. This was accomplished to try to determine if the last year of instruction under PRIME TIME had produced higher scores than the previous three years.

Analysis. The scores of the groups were analyzed by seven separate one way analyses of variance. All results were tested at the .05, .01, and

.001 levels of significance.

Post Hoc Observations. Means for individual teachers and means for each of the participating elementary schools were also compared. These results were not subjected to a statistical test but were used only for subjective comparisons. Graphs of the comparisons also appear in Section 6 of this report.

Results

The results of the study are contained in Tables II and III and Section 6 of this report. Table II shows the mans of the measures for the 1987-88 academic year. Table III and the Figures of Section 6 contain the means for each of the five school years of the study. The significance of the differences between the means of the previous years have been previously documented (Gilman, Tillitski, Mohr, and Stone, 1987). The difference is apparent in Table III and in the Figures of Section 6 of this report.

However, from Table III, it can also be noted that the PRIME TIME classes of the 1987-88 school year also possessed a higher score than the means of classes from the previous years. An analyses of these differences is contained in Table IV.

Table II
Data from 1987-88 Study

	<u>Means</u>	<u>Standard Deviation</u>
Math %	47/52 = 91.8%	7.3
Math Skills Mastered		
Reading %	57.9/70 = 82.7%	9.5
Reading Skills Mastered		
Self Concept	16.4	2.78
Attitude Toward School	13.0	3.39
Total Affective	29.3	5.32

Table III
Summary Statistics for School Years

1983-84 to 1987-88

<u>Comparison</u>	<u>Large Class</u>	<u>School Years</u>			
	1983-84	1984-85	1985-86	1986-87	1987-88
Average Class Size	23.7	19.9	16.1	16.6	17.5
Math Mean Percent	75.5	86	83.5	80.6	91.8
Mean Reading Percent	74.8	83.2	81.6	80.3	82.7
Mean Math Skills Mastered	8.5	11.8	11.3	10.9	12.4
Mean Reading Skills Mastered	10.6	13.6	13.3	13.1	13.6
Mean Self Concept	11.4	16.5	15.5	16.0	16.4
Mean Attitude Toward School	11.7	12.1	11.5	13.1	13.0
Total Affective	22.9	28.6	27.0	29.1	29.3

Table IV
Levels of Significance for Years Compared
in the Study

<u>Comparison</u>	<u>Significance of Analysis of Variance Results</u>			
	Large Class 1983-84 vs Year 1 of PRIME TIME 1984-85	Large Class 1983-84 vs Year 2 of PRIME TIME 1985-86	Large Class 1983-84 vs Year 3 of PRIME TIME 1986-87	Large Class of 1983-84 vs Year 4 of PRIME TIME 1987-88
Average Class Size	.001	.001	.001	.001
Math Mean Percent	.001	.001	.001	.001
Reading Mean Percent	.001	.001	.001	.001
Mean Math Skills Mastered	.001	.001	.001	.001
Mean of Self Concept Measure	.001	.001	.001	.001
Mean of Attitude/School Measure	.001	n.s.	.001	.001
Mean of Total Affective Scores	.001	.001	.001	.001

However, the unexpected result of the study was the achievement gains experienced by students in the last year of the study. Students of the 1987-88 school year scored higher on all achievement measures than PRIME TIME students of the preceding years. Similar although less dramatic gains were also experienced by the 1987-88 students on some of the affective measures. A summary of the statistical tests to compare the gains of 1987-88 students to the gains of previous PRIME TIME classes is contained in Table V.

Table V

**Summary of Statistical Tests for Post Hoc Analysis
of Differences Between Latest and Earlier
Years of PRIME TIME**

Comparison	Latest (87-88) vs 84-85 PRIME TIME years	Latest (87-88) vs 85-86 PRIME TIME years	Latest (87-88) vs 86-87 PRIME TIME years
Average Class Size	n.s.	n.s.	n.s.
Math Mean Percent	.05	.01	.001
Reading Mean Percent	.01	.01	.001
Mean Math Skills Mastered	.01	.01	.001
Mean Reading Skills Mastered	n.s.	n.s.	.05
Mean of Self Concept Measure	n.s.	n.s.	.05
Mean, Attitude/School Measure	.05	.01	n.s.
Mean, Total Affective Measures	.05	.01	n.s.

Discussion, Conclusions, and Recommendations

From the results of the statistical tests performed on the data obtained in the study, it can be concluded that the gains experienced by PRIME TIME students during the early years of the project have not only been maintained but they have also been strengthened. The gains experienced by students during the last year of the study provide evidence that the fine tuning of teachers toward the objectives of their instruction has caused them to obtain their instructional goals more effectively.

Although previously cited research has shown that smaller classes do not guarantee higher achievement, the higher scores obtained by first grade PRIME TIME students show that the total PRIME TIME program at North Gibson is working well.

A previous evaluation of the North Gibson PRIME TIME program (Gilman, Tillitski, Mohr, and Stone, 1987) has demonstrated that PRIME TIME has lost its impact by grade 3.

The refinement of the first grade instructional program to ensure that goals have been met is a good model to be followed in all reduced size classes. It is hoped that this procedure will have the same positive impact at other grade levels in future years.

The continuation of PRIME TIME in Grade 1 continues to produce its desired results on all measures that were utilized in this study.

References

Bain, Helen Pate and C. M. Achilles (1986, May). Interesting Developments on Class Size. Phi Delta Kappan, 67(9), 662-5.

Bourke, Sid (1986, Winter). How Smaller is Better: Some Relationships Between Class Size, Teaching, and Student Achievement. American Educational Research Journal, 23(4), 558-71.

Cacha, Frances B. (1982, Fall). The Class Size and Achievement Controversy. Contemporary Education, 54(1), 13-17.

Cahen, Leonard S. and Nikola N. Filby (1979, March). The Class Size/Achievement Issue: New Evidence and a Research Plan. Phi Delta Kappan, 60, 42-5.

Educational Research Service, Inc. (a) (1978, December). A Summary of Research on Class Size. Education Digest, 44, 26-28.

Educational Research Service, Inc. (b) (1980, December). Class Size Research: A Critique of Recent Meta-Analysis. Phi Delta Kappan, 62, 239-241.

Gilman, D. and R. Antes (1985). The Educational Effects of the Introduction of a State Supported Program of Smaller Classes. A comprehensive analysis of PRIME TIME and its effects on test results. Professional School Services, Indiana State University, Terre Haute, IN.

Glass, G. V. & Down, A. G. (1979, November). Does Class Size Make a Difference? Instructor, 89, 19.

Klein, Karen (1985, April). Practical Applications of Research. Phi Delta Kappan, 66(8), 578-80.

Preece, Peter F. W. (1987, August). Class Size and Learning: A Theoretical Model. Journal of Educational Research, 80(6), 377-9.

Sava, Samuel G. (1984, September). PRIME TIME in Indiana. Principal, 64, 64.

Silberman, Arlene (1978, October). A Question that Haunts Teachers. Instructor, 88, 38.

Smith, Mary Lee and Gene W. Glass (1980, March). The Effect of Class Size on What Happens in Classrooms. The Educational Digest, 45, 16-18.

Tomlinson, Tommy M. (1988, September). Class Size and Public Policy: Policies and Panaceas. Education Department, Office of Educational Research and Improvement, Programs for the Improvement of Practice, Information Services, 52 p.

Tillitski, Christopher; Gilman, D.A.; Mohr, A.J.; and Stone, W. PRIME TIME at North Gibson School Corporation: A Three Year Study. ERIC Resource in Education, In process, 1988.

Table VI
Mean Scores by School and by Teacher

	N	Math	Reading	Self Concept	Attitude/School	Total Affective
Baldwin Heights	14	49.1	61.4	16.6	12.9	29.6
Barton	14	49.1	61.4	16.6	12.9	29.6
Brownfield	79	48.5	57.4	16.1	13.1	29.1
Teacher 1	19	46.7	53.1	15.4	11.5	26.9
Teacher 2	18	49.3	55.0	16.8	12.7	28.7
Teacher 3	21	49.6	60.6	17.5	15.0	32.4
Teacher 4	22	48.2	60.0	14.9	13.0	27.9
Lowell	47	45.9	57.9	16.8	12.8	29.6
Teacher 1	16	49.4	60.8	16.4	11.4	27.8
Teacher 2	15	41.8	52.7	18.1	14.1	32.4
Teacher 3	16	46.1	59.6	16.0	13.1	29.1
Total	142	47.7	57.9	16.4	13.0	29.3

Table VII
Summary Statistics for School Years
1983-84 to 1987-88

Comparison	Large Class		School Years		
	1983-84	1983-84	1984-85	1985-86	1986-87
Average Class Size	23.7	19.9	16.1	16.6	17.5
Math Mean Percent	75.5	86.	83.5	80.6	91.8
Mean Reading Percent	74.8	83.2	81.6	80.3	82.7
Mean Math Skills Mastered	8.5	11.8	11.3	10.9	12.4
Mean Reading Skills Mastered	10.6	13.6	13.3	13.1	13.6
Mean Self Concept	11.4	16.5	15.5	16.0	16.4
Mean Attitude Toward School	11.7	12.1	11.5	13.1	13.0
Total Affective	22.9	28.6	27.0	29.1	29.3

FIRST GRADE CLASS SIZE BY YEAR

CLASS SIZE

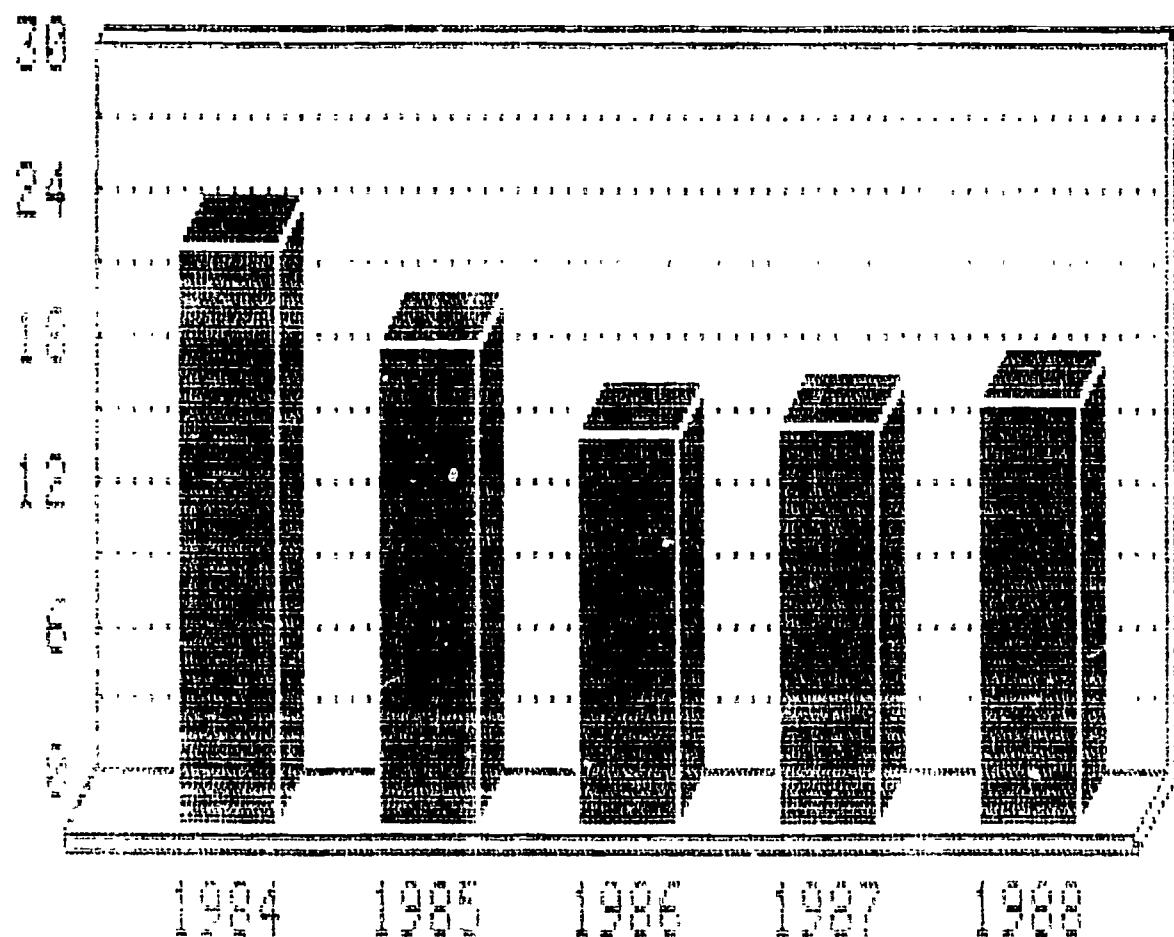
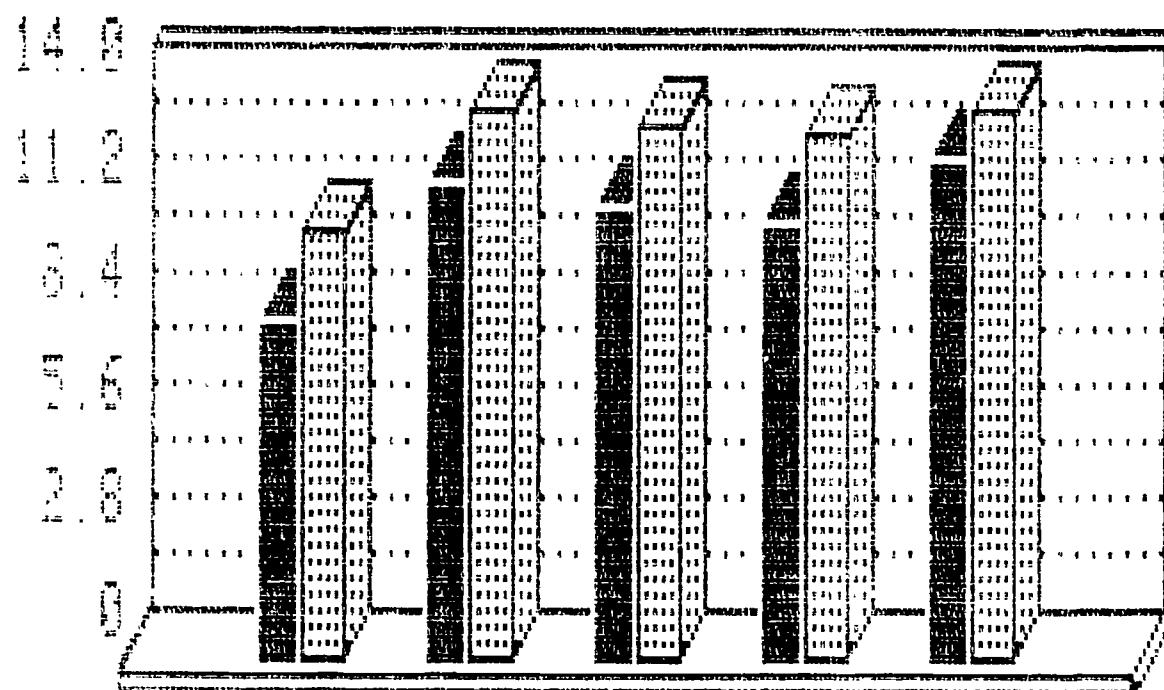


FIGURE 2

MEAN NUMBER OF SKILLS MASTERED BY YEAR

MEAN SKILLS



ACADEMIC YEAR ENDING

■ MATH ▨ READING

FIGURE 3

MEAN PERCENTAGE CORRECT, SKILLS TEST

PERCENT CORRECT

100

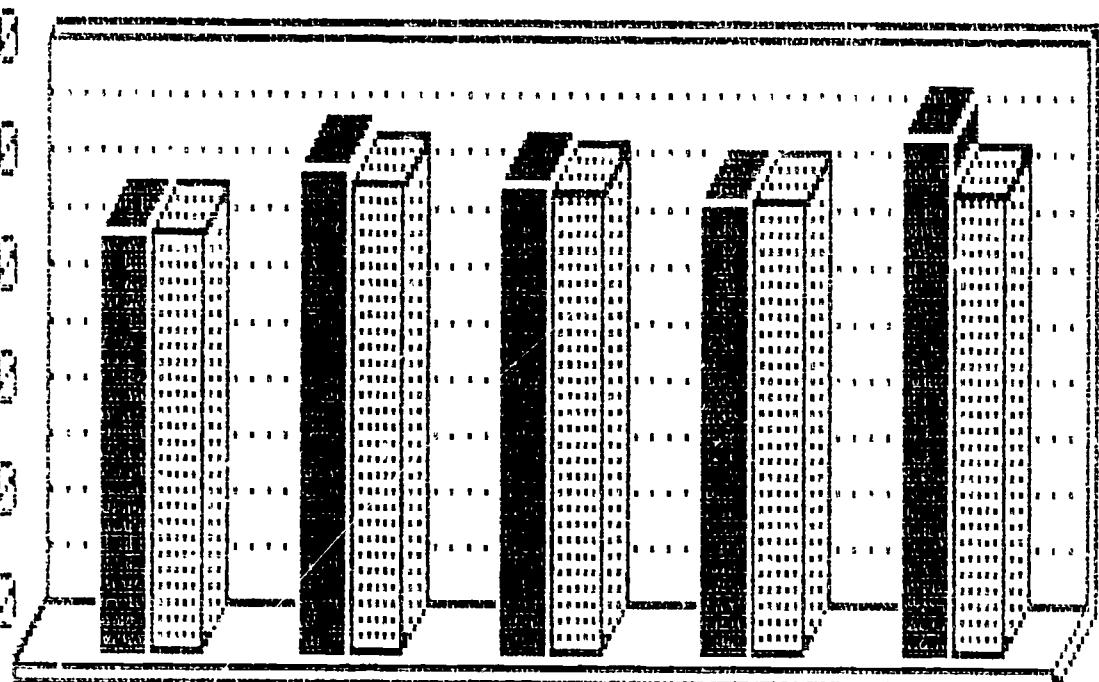
80

60

40

20

0



1984 1985 1986 1987 1988

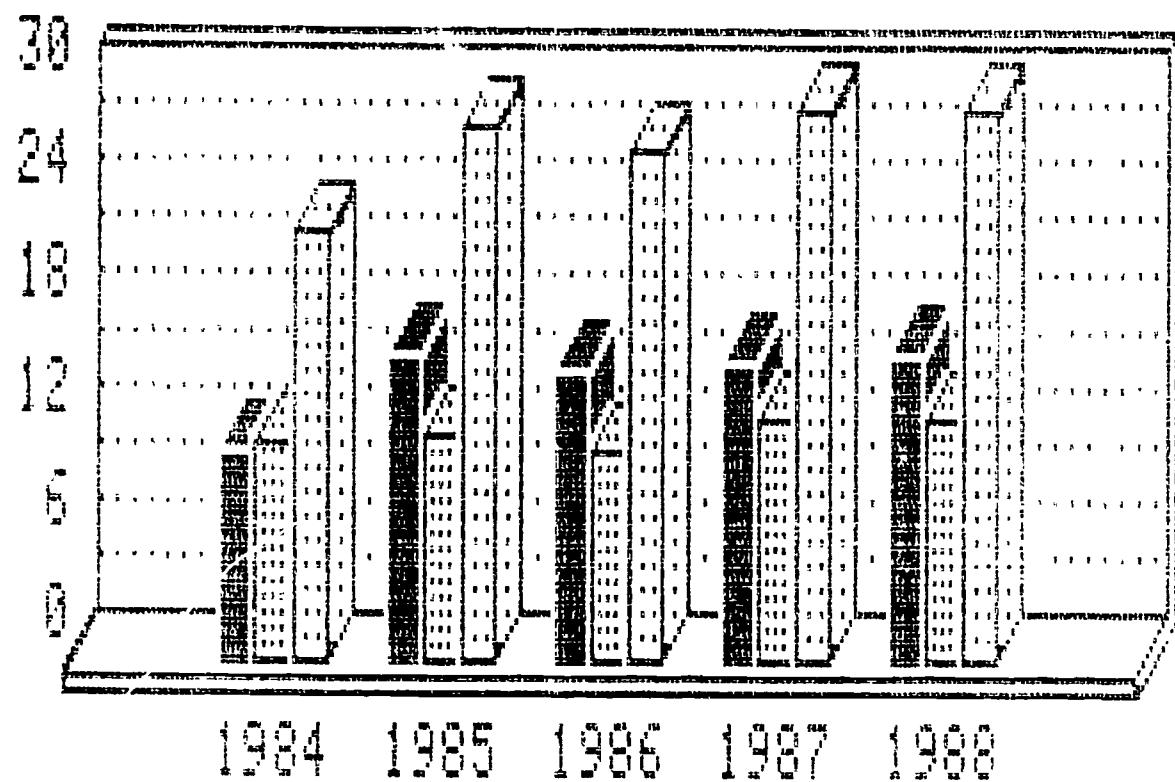
ACADEMIC YEAR ENDING

■ MATH ▨ READING

FIGURE 4

MEAN AFFECTIVE SCORES BY YEAR

RAW SCORE



ACADEMIC YEAR ENDING

■ SELF CON. ■ AT/SCHOOL ■ TOTAL

FIGURE 5

Title: Mathematics Skill Scores by School

Fred		br	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Lisa		br	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Heath	Aarn	br	4	4	3	0	4	4	4	4	4	4	4	4	4	4	3	4	4
Kristi	Ashby	br	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4
Gregory	Bane	br	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
John	Bates	br	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Johnna	Berry	br	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Mariah	Bradshaw	br	4	4	4	2	4	4	4	4	4	4	4	4	4	4	4	4	4
Ashley	Burch	br	4	4	3	1	4	4	4	4	4	4	4	4	4	4	4	4	4
Clint	Butts	br	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Becky	Chapman	br	4	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Rachel	Collins	br	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Skyler	Cook	br	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Jennifer	Corgal	br	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4
Gentry	Dodd	br	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Shauna	Dougan	br	3	4	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4
Lonnie	Duncan	br	1	4	4	2	4	4	4	4	4	4	4	4	4	4	4	4	4
Donna	Feathers	br	1	2	4	4	4	4	4	4	4	4	4	4	4	4	3	2	3
Lendal	Freeman	br	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Jered	Gentry	br	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4
Crystal	Greentree	br	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Matthew	Greer	br	2	4	4	3	4	4	4	4	4	4	4	4	4	4	2	2	4
Angela	Hayes	br	3	2	4	4	4	4	4	3	4	3	2	4	1	3	3	3	3
Chris	Hayes	br	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4
Ivy	Hill	br	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4
Laura	Hoffman	br	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Emily	Hoover	br	4	4	3	4	4	4	4	3	4	4	3	4	3	4	3	4	4
Erica	Hoover	br	4	3	4	4	4	4	4	4	4	4	4	4	2	4	4	4	4
Adam	Hudsona	br	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Dustin	Hurst	br	4	3	4	3	4	4	4	4	4	4	4	4	4	1	2	4	4
Nick	Hyneman	br	4	2	3	2	4	4	4	4	4	4	4	4	2	3	2	4	4
Janiel	Ice	br	4	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4
Sarah	Iunghuhn	br	4	4	4	4	4	4	3	3	3	3	3	4	4	4	4	4	4
Deron	Jackson	br	4	1	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4
Brian	Jenkins	br	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Randi	Kee	br	3	3	4	3	4	4	4	3	4	4	4	3	3	3	4	4	4
Kara	Key	br	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	1	4
Kendra	LaMar	br	4	2	3	4	4	4	4	4	4	4	4	3	3	4	3	2	4
Peter	Lamar	br	4	4	4	4	4	1	4	4	4	4	4	3	4	2	4	4	4

Amanda	Lasley	br	4	Knows numerals to 100 in any order
Rachel	Loesch	br	4	Writes and counts to 100 by 10's, 5's, and 2's
Katie	Longabaugh	br	4	Solves addition problems with 3 addends
Tyler	Loveless	br	4	Understands concepts $>$, $<$, $=$
Giowrik	Mathy	br	3	Adds one digit numbers without regrouping
Jamie	Moore	br	4	Subtracts one digit numbers without regrouping
Megan	Morrison	br	4	Recognizes the symbols $+$, $-$, \times , \div for addition and multiplication
Bobby	Murphree	br	4	Identifies coins and their value in cents
Laura	Orr	br	4	Recognizes ordinal numbers 1-5
Heith	Pennell	br	4	Knows place value for tens and ones
Clint	Pollock	br	4	Identifies time to the hour and half-hour
Jennifer	Randolph	br	4	Recognizes halves, thirds, and fourths
Ryan	Reidford	br	4	Identifies coins and their value in cents
Ashlee	Ritchey	br	4	Recognizes ordinal numbers 1-5
Andrew	Robb	br	4	Knows place value for tens and ones
Eric	Salemie	br	2	Identifies coins and their value in cents
Tiffany	Schafer	br	4	Identifies coins and their value in cents
Melissa	Schurmeier	br	4	Identifies coins and their value in cents
David	Shatz	br	4	Identifies coins and their value in cents
April	Shaw	br	4	Identifies coins and their value in cents
Jeremy	Smith	br	4	Identifies coins and their value in cents
Matt	Swank	br	4	Identifies coins and their value in cents
Natalie	Teeters	br	4	Identifies coins and their value in cents
Summer	Temme	br	4	Identifies coins and their value in cents
Travis	Thompson	br	4	Identifies coins and their value in cents
Chad	Tinsley	br	4	Identifies coins and their value in cents
Jesseka	Tolbert	br	4	Identifies coins and their value in cents
Sausha	Tooley	br	4	Identifies coins and their value in cents
Amanda	Traylor	br	4	Identifies coins and their value in cents
Duane	Ungethun	br	3	Identifies coins and their value in cents
Steve	Walden	br	4	Identifies coins and their value in cents
Ryan	Warner	br	4	Identifies coins and their value in cents
Chassity	West	br	4	Identifies coins and their value in cents
Somer	Whaley	br	4	Identifies coins and their value in cents
Josh	Wheatley	br	4	Identifies coins and their value in cents
Andy	Wheeler	br	4	Identifies coins and their value in cents
Shannon	White	br	4	Identifies coins and their value in cents
Saraal	Whitehead	br	4	Identifies coins and their value in cents
Melissa	Wilkerson	br	4	Identifies coins and their value in cents
Nick	Winters	br	4	Identifies coins and their value in cents
Andrea	Witt	br	4	Identifies coins and their value in cents
Levi	Zimmerman	br	4	Identifies coins and their value in cents

Chrishana	1	4	4	4	4	4	4	4	4	4	4	4	4	4
Dejuan	1	4	4	3	4	3	4	4	4	4	4	3	4	2
Nathan	1	4	4	4	4	4	4	4	4	4	4	4	4	4
Thomas	1	3	1	4	2	4	4	4	4	4	4	3	1	3
Eric	Anderson	1	4	4	3	4	4	4	3	4	4	3	4	1
Randi	Bailey	1	4	4	4	4	4	4	4	4	3	4	4	4
Knute	Beard	1	4	4	4	3	4	4	4	3	4	3	4	4
Aaron	Bota	1	4	3	4	1	4	4	4	3	4	4	1	0
Jeremy	Broch	1	4	4	4	4	4	4	4	4	4	4	4	4
Charity	Bush	1	4	4	4	3	4	4	4	3	4	4	3	0
Chrystle	Chavis	1	4	4	4	1	4	4	4	4	4	4	4	4
Jeff	Davis	1	4	4	3	1	4	4	4	4	2	1	4	4
Penny	Davis	1	4	3	4	1	4	4	4	3	4	3	0	2
Crystal	Dill	1	4	2	4	4	4	4	4	3	4	4	3	4
Joshua	Dixon	1	4	4	4	4	4	4	4	4	4	4	4	4
Shelby	Dougan	1	4	3	4	4	4	4	4	4	4	4	3	3
Isaac	Edwards	1	4	4	4	4	4	4	4	4	4	4	3	4
Jason	Gasaway	1	4	4	3	4	4	4	4	3	4	4	2	4
Bryon	Gayer	1	4	4	4	4	4	4	4	4	4	3	4	4
Angel	Helm	1	4	1	4	4	4	4	4	4	3	4	3	4
Amy	Hensley	1	4	4	4	4	4	4	4	4	4	4	4	3
James	Hensley	1	4	4	4	3	4	4	4	3	4	3	2	1
Beau	Hill	1	4	4	4	4	4	4	4	4	3	4	4	4
Krista	Hornback	1	4	4	4	4	4	4	4	4	3	1	4	4
March	Hux	1	4	3	3	3	4	4	4	4	3	4	4	4
Rachel	Jones	1	4	4	4	2	4	4	4	4	4	4	3	2
Jeremy	Lana	1	4	4	4	4	4	4	4	4	4	4	2	4
April	Maddey	1	4	4	4	3	4	4	3	3	4	4	2	4
Joy	Madison	1	4	2	0	0	4	4	4	0	3	0	1	1
Christi	Mason	1	4	4	4	4	4	4	4	4	4	4	2	3
Jamie	McClure	1	4	4	4	4	4	4	4	3	4	3	4	2
Steven	McGill	1	4	4	4	3	4	4	4	4	3	4	4	4
Steve	Minton	1	3	4	4	3	4	4	3	4	4	4	3	2
Jamie	Morgan	1	4	3	2	3	4	4	4	4	3	4	2	0
Dale	Morris	1	4	4	4	4	4	4	4	4	4	4	4	2
Jeremy	Nelson	1	4	4	4	3	4	4	4	4	4	4	4	2
Aaron	Palmer	1	4	2	4	3	4	4	4	0	4	3	4	1
Clint	Reid	1	4	3	4	4	4	4	4	2	4	4	1	4
Laura	Robinson	1	4	3	4	4	4	4	3	4	4	4	4	4

Sarah	Scott	1	4	Knows numerals to 100 in any order
Kim	Skaggs	1	4	Writes and counts to 100 by 10's, 5's, and 2's
Cliff	Teeters	1	4	Solves addition problems with 3 addends
Leslie	Watson	1	4	Understands concepts > < =
Zach	Weisheit	1	4	Adds one digit numbers without regrouping
Jamaal	Whiter	1	4	Subtracts one digit numbers without regrouping
Jeff	Wilkerson	1	4	Recognizes the symbols "+" for addition and "-" for subtraction
Thaddeus	Young	1	4	Tells time to the hour and half-hour
Thomas	Young	1	3	Identifies coins and their value in cents
				Recognizes ordinal numbers 1-5
				Knows place value for tens and ones
				finds missing addends
				Recognizes halves, thirds, and fourths

Cliff	Teeters	1	Recognizes Dolch basic sight words in context, and situations
Jamaal	Turner	3	Recognizes word families
Leslie	Watson	4	Chooses from multiple meanings
Zach	Weisheit	4	Recognizes upper and lower case letters
Jeff	Wilkerson	4	Recognizes consonant combinations in initial, medial, and final position
Thaddeus	Young	4	Uses digraphs in decoding
Thomas	Young	1	Identifies silent letters and consonants and uses them in decoding
		1	Uses contractions in decoding
		2	Pronounces short vowel sound
		2	Pronounces long vowel sounds
		2	Alphabetizes to first letter
		2	Reads paragraph and finds answers to questions
		3	Knows contractions
		2	Recognizes the number of syllables in words
		2	Recognizes main ideas

File: PRIMETIME

Page

1

Report: AFFECTIVE

NOV 9 9

8

Selection: SCHOOL: contains BH

FIRST:	LAST:	SCHOOL:	SELF:	SCHOOL:	TOTAL:
--------	-------	---------	-------	---------	--------

Jason	Biswell	bh	18	15	33
Amanda	Brown	bh	17	13	30
Corinne	Darst	bh	19	16	35
Christopher	Dearing	bh	14	16	30
Branson	Easley	bh	17	13	30
Tricia	Grooves	bh	19	16	35
Casey	Herrin	bh	19	10	29
Ernest	Howder	bh	17	14	31
Jay	Mathew	bh	13	8	21
Megan	Pickens	bh	19	11	30
Jill	Snider	bh	15	12	27
Beth	Vanatti	bh	16	13	29
Shannon	Wethington	bh	14	9	23
Joshua	White	bh	16	15	31

File: PRIMETIME

1

Report: AFFECTIVE

8

Selection: SCHOOL: contains BR

FIRST: LAST: SCHOOL: SELF: SCHOOL: TOTAL:

Lonnie		br	14	16	30
Jennifer		br	18	12	30
Gregory		br	9	17	26
Laura		br	18	15	33
Shannon		br	9	8	17
Lisa		br	15	10	25
Travis		br	11	12	23
Jamie		br	16	11	27
Fred		br	10	5	15
Dusty		br	14	8	22
Gowri		br	19	15	34
Josh		br	18	14	32
Tiffany		br	11	7	18
Eric		Brumfield	3	13	16
Deronai		br	13	15	28
Heath	Aarn	br	16	15	31
Kristi	Ashby	br	18	15	33
John	Bates	br	16	9	25
Johnna	Berry	br	18	13	31
Mariah	Bradshaw	br	11	0	11
Ashley	Burch	br	18	17	35
Clint	Butts	br	15	17	32
Becky	Chapman	br	17	16	33
Rachel	Collins	br	19	17	36
Skyler	Cook	br	19	15	34
Gentry	Dodd	br	19	15	34
Shauna	Dougan	br	15	14	29
Donna	Feathers	br	15	15	30
Lendal	Freeman	br	15	17	32
Jered	Gentry	br	15	10	25
Crystal	Greentree	br	19	15	34
Matthew	Greer	br	19	10	29
Angela	Hayes	br	17	15	32
Chris	Hayes	br	19	15	34
Ivy	Hill	br	18	8	26
Laura	Hoffman	br	19	16	35
Erica	Hoover	br	17	10	27
Emily	Hoover	br	15	14	29
Adam	Hudson	br	15	16	31
Nick	Hyneman	br	17	14	31
Daniel	Ice	br	18	9	27
Sarah	Iunghuhn	br	18	15	33
Brian	Jenkins	br	19	17	36
Rendi	Kee	br	12	3	15
Kara	Key	br	19	14	33
Peter	LaMar	br	17	14	31
Kendra	LaMar	br	15	11	26
anda	Lastley	br	17	14	31
chel	Loesch	br	15	12	27

File: PRIMETIME

2

Report: AFFECTIVE

8

Selection: SCHOOL: contains BR

Page

NOV 9 8

FIRST:	LAST:	SCHOOL:	SELF:	SCHOOL:	TOTAL:
--------	-------	---------	-------	---------	--------

Katie	Longabaugh	br	18	15	33
Tyler	Loveless	br	19	11	30
Megan	Morrison	br	15	9	24
Bobby	Murphree	br	16	4	20
Heith	Pinnell	br	17	15	32
Clint	Pollock	br	18	16	34
Jennifer	Randolph	br	13	10	23
Fyan	Reidford	br	19	15	34
Ashley	Ritchey	br	19	14	33
Andrew	Robb	br	19	16	35
Melissa	Schurmeier	br	18	17	35
David	Shatz	br	9	4	13
April	Shaw	br	18	15	33
Jeremy	Smith	br	16	14	30
Matt	Swank	br	16	13	29
Natalie	Teeters	br	19	17	36
Summer	Temme	br	17	10	27
Chad	Tinsley	br	19	15	34
Jessica	Tolbert	br	18	14	32
Sausha	Tooley	br	19	15	34
Amanda	Traylor	br	17	17	34
Duane	Ungethun	br	17	12	29
Steve	Walden	br	15	6	21
Ryan	Warner	br	18	10	28
Chasity	Weist	br	18	15	33
Sommer	Whaley	br	16	16	32
Andy	Wheeler	br	19	16	35
Sarah	Whitehead	br	19	17	36
Melissa	Wilkerson	br	19	15	34
Nick	Winters	br	16	15	31
Andrea	Witt	br	16	16	32
Levi	Zimmerman	br	15	8	23

File: PRIMETIME

Page

1

Report: AFFECTIVE

NOV 9 8

8

Selection: SCHOOL: does not contain UM
and SCHOOL: contains L

FIRST: LAST: SCHOOL: SELF: SCHOOL: TOTAL:

Thomas		1	8	14	22
Rand		1	18	14	32
Sarah		1	18	16	34
Joshua		1	16	4	20
Knute		1	15	10	25
Zach		1	19	8	27
Bryan		1	17	10	27
Laura		1	19	14	33
Chrishana		1	19	12	31
Amy		1	16	16	32
Nathan		1	12	9	21
DeJuan		1	16	5	21
Beau		1	19	8	27
Isaac		1	19	16	35
Angel		1	12	7	19
Jeremy		1	16	15	31
Clint		1	18	14	32
Eric	Anderson	1	19	16	35
Aaron	Bota	L	18	15	33
Charity	Bush	1	19	15	34
Crystle	Chavis	1	19	17	32
Denny	Davis	1	16	9	25
Jeff	Davis	1	14	7	21
Crystal	Dill	1	15	16	31
Shelby	Dugan	L	16	10	26
Jason	Gasaway	1	17	15	32
James	Hensley	1	19	13	32
Krista	Hornback	1	18	16	34
Marcy	Hux	1	14	9	23
Rachel	Jones	1	15	11	26
Jeremy	Lance	L	19	13	32
April	Maddox	1	17	15	32
Joy	Madison	1	17	14	31
Christi	Mason	1	18	13	31
Jamie	McClure	1	15	7	22
Steven	McGill	1	15	16	31
Steve	Minton	1	19	16	35
Jamie	Morgan	1	19	16	35
Dale	Morris	1	16	14	30
Aaron	Palmer	1	19	14	33
Kim	Skaggs	1	15	15	30
Clifton	Teetens	1	19	16	35
Jamaal	Turner	1	19	16	35
Leslie	Watson	1	16	13	29
Jeff	Wikerson	1	19	16	35
Thaddeus	Young	1	16	13	29

OBJECTIVE
REFERENCED

1

Reading
EVALUATION
SYSTEM

NAME _____

STUDENT NO. _____ DATE _____

TEACHER _____

SCHOOL _____

SCORE

ITEM	SKILLS	SCORE	MASTERY
1 - 4	Recognizes Dolch Basic Sight Words in instructional situations	-----	-----
5 - 8	Recognizes word families	-----	-----
9 - 12	Chooses from multiple meanings	-----	-----
13 - 16	Recognizes upper and lower case letters	-----	-----
17 - 22	Recognizes consonant sound heard in initial, medial and final position	-----	-----
23 - 26	Uses blends in decoding	-----	-----
27 - 30	Uses digraphs in decoding	-----	-----
31 - 34	Identifies silent letter combinations and uses them in decoding	-----	-----
35 - 38	Uses diphthongs in decoding	-----	-----
39 - 42	Pronounces <u>short</u> vowel sound	-----	-----
43 - 46	Pronounces <u>long</u> vowel sound	-----	-----
47 - 50	Alphabetizes to first letter	-----	-----
51 - 56	Reads paragraph and finds answers to questions	-----	-----
57 - 60	Knows contractions	-----	-----
61 - 64	Recognizes the number of syllables in words	-----	-----
65 - 70	Recognizes main ideas	-----	-----

North Gibson School Corporation
P O BOX 325
Princeton, Indiana 47670

OBJECTIVE
REFERENCED

1

MATHEMATICS

EVALUATION
SYSTEM

NAME _____ KEY _____

STUDENT NO. _____ DATE _____

TEACHER _____

SCHOOL _____

SCORE

ITEM	SKILLS	SCORE	MASTERY
1 - 4	Knows numerals to 100 in any order	----	----
5 - 8	Writes and counts to 100 by 10's, 5's, and 2's.	----	----
9 - 12	Solves addition problems with 3 addends.	----	----
13 - 16	Understands concepts: >, <, = .	----	----
17 - 20	Adds one digit numbers without regrouping.	----	----
21 - 24	Subtracts one digit numbers without regrouping.	----	----
25 - 28	Recognizes the symbols "+" for addition and "-" for subtraction.	----	----
29 - 32	Tells time to the hour and half-hour.	----	----
33 - 36	Identifies coins and their value in cents.	----	----
37 - 40	Recognizes ordinal numbers 1 - 5.	----	----
41 - 44	Knows place value for tens and ones.	----	----
45 - 48	Finds missing addends.	----	----
49 - 52	Recognizes halves, thirds, and fourths.	----	----

North Gibson School Corporation
P.O. BOX 325
Princeton, Indiana 47670

47
NAME _____

TEACHER _____

DATE _____

SCHOOL _____

ABOUT ME

During the next few minutes you are going to look at some faces and I am going to ask some questions about how you feel. One of the faces shows children who are happy and glad. The other face shows children who are sad. If you feel good about the questions, draw a cross (X) through the smiling face. If you feel bad about the question, draw a cross (X) through the frowning face.

1. How do you feel when you are happy? 
2. How do you feel when you are sad? 
3. How do you feel about how strong and healthy you are? 
4. How do you feel about the way other children treat you? 
5. How do you feel about the way you do in school? 
6. How do you feel about meeting new children? 
7. How do you feel about how fast you learn new things? 

8. How do you feel about the way your parents treat you?



9. How do you feel when you get your report card?



10. How do you feel when your parents see your report card?



11. How do you feel about the kind of face you have?



12. How do you feel about how much you know?



13. How do you feel when the teacher asks you to read out loud?



14. How do you feel about playing with other children at recess?



15. How do you feel when you think about going to your home?



16. How do you feel about the neighborhood in which you live?



17. How do you feel about the clothes you wear?



18. How do you feel about the way you look?



19. How do you feel about the house you live in?



NAME _____

TEACHER _____

DATE _____

SCHOOL _____

ABOUT MY SCHOOL

20. How you do feel when it's time to go to school?



21. How do you feel when you think about school next year?



22. How do you feel about the way your teacher treats you?



23. How do you feel when the teacher says it's time to get out the books and get to work?



24. How do you feel when school is over each day?



25. How do you feel about having a chance to learn something new?



26. How do you feel when your neighbors ask you if you like your school?



©

Professional School Services
David Alan Gilman, Ph.D.
1315 School of Education
Indiana State University
Terre Haute, IN 47809

27. How will you feel when your summer vacation is over and it's time to back to school?

28. How do you feel when you walk inside your school?

29. Your teacher says, "We are not going to have school today." How would your face look?

30. You and your friends are talking about school. How would your face look?

31. At home during dinner, you tell your parents about school. How would your face look?

32. It is about the end of math class. The teacher says, "Tomorrow the class will have more time for math." Which face shows how you feel?

33. At lunch time, you are talking to your friends about school. Which is your face?

34. Your teacher hands out report cards to the class. Which is your face?

35. Your class is taking a test. Show how you feel about tests.

36. If they were going to tear down your school and build a highway. Which face shows how you feel?

37. How do you feel when you have to ask the teacher for help?

